

REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the present amendments and following discussion, is respectfully requested.

Claims 1, 2, 4-6, 8-10, and 12 are pending in this case.

The outstanding Office Action rejected Claims 1, 5, and 9 under 35 U.S.C. § 112, first paragraph, and rejected Claims 1, 2, 4-6, 8-10, and 12 under 35 U.S.C. § 103(a) as unpatentable over Kokubo (U.S. Patent No. 4,984,002) in view of Shepherd, et al. (U.S. Pub. No. 2003/0133026, herein “Shepherd”).

With regard to the rejection of Claims 1, 5, and 9 under 35 U.S.C. § 112, first paragraph, for the recitation of “an exposure setup operation configured to set a number of electric shutter pulses,” paragraph [0053] of the published Specification defines event A as the setting of the number of electric shutter pulses in a discussion of prior art, and paragraph [0054] describes the claimed invention including processing of event A. Because the Specification provides support for reciting “an exposure setup operation configured to set a number of electric shutter pulses,” Applicants respectfully request that the rejection of Claims 1, 5, and 9 under 35 U.S.C. § 112, first paragraph, be withdrawn.

Applicants traverse the rejection of the claims under 35 U.S.C. § 103(a).

Claim 1 defines “an exposure setup operation configured to set a number of electric shutter pulses,” a setup part “configured to generate a timing signal which prescribes an exposure period of an image pick up device,” and “said imaging apparatus control part shortens the time till the generation of the next exposure period timing signal from a regular exposure period” when “the time being calculated by using the measured elapsed time, is equal to or greater than a predetermined time.”

With regard to the above-quoted features of Claim 1, the outstanding Office Action asserts that Shepherd teaches an exposure setup operation, defined by Claim 1 as “configured

to set a number of electric shutter pulses,” and asserts that Kokubo teaches all the other features of Claim 1.

As recited by Claim 1, “said imaging apparatus control part shortens the time till the generation of the next exposure period timing signal,” which is earlier than VD of a regular period. This is possible without misalignment in automatic exposure because, as recited by Claim 1, “said timing part measures the elapsed time from the exposure period timing signal right before a beginning of an exposure setup operation...to the beginning of the exposure setup operation” and uses “a time from the beginning of the exposure setup operation to a generation of a next exposure period timing signal...calculated by using the measured elapsed time” for comparison. For example, the claimed invention can initiate an exposure after the exposure setup is completed, by setting a shorter time until the generation of the next exposure period timing signal rather than the regular exposure period, when the time from the beginning of the calculated exposure setup operation to the generation of the next exposure period timing signal is greater than a predetermined time.

Kokubo, on the other hand, describes a camera in which the beginning of an exposure (storage) is constant while an end of the exposure is variable, as depicted at Fig. 4F of Kokubo, to change the exposure time.

In a real shutter mode of Kokubo, when a trigger is input, an electric shutter is operated to initiate an exposure. After a predetermined time has elapsed, a readout pulse is output to control the exposure time. In the real shutter mode, when the trigger is input, the electric shutter is operated by the circuit depicted at Fig. 6. Simultaneously, a variable delay circuit is started, and then VD and a sensor gate pulse are output to perform readout, after a predetermined delay time (exposure time) has elapsed. Thus, an exposure for a time set in the delay circuit can be executed in synchronization with the trigger. Meanwhile, VD is

generated after the delay time has elapsed and a 525 counter 15 is reset. Therefore, a period of VD is returned to an original period.

The trigger signal in Kokubo is a signal used to initiate an exposure, because Kokubo describes that accumulation is initiated in synchronization with the trigger signal from outside.

On the other hand, in the exposure setup operation defined by Claim 1, an exposure time is adjusted by setting a number of electric shutter pulses. Thus, the exposure setup operation of Claim 1 does not correspond with the trigger signal of Kokubo.

In the real shutter mode of Kokubo, if the exposure setup operation, as defined by Claim 1, is used instead of the trigger signal, the real shutter mode of Kokubo would not function.

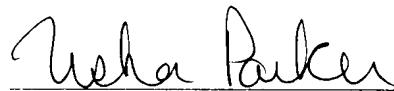
As discussed above, Kokubo and Shepard, even in combination, do not teach or suggest every feature of Claim 1. Thus, Applicants respectfully request that the rejection under 35 U.S.C. § 103(a) of Claim 1 and Claims 2 and 4, which depend therefrom, be withdrawn.

Claims 5 and 9, though differing in scope and statutory class from Claim 1, patentably define over Kokubo and Shepherd for similar reasons as Claim 1. Thus, Applicants respectfully request that the rejection under 35 U.S.C. § 103(a) of Claim 5, Claims 5 and 8, which depend therefrom, Claim 9, and Claims 10 and 12, which depend therefrom, be withdrawn.

Consequently, in light of the above discussion, the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



James J. Kulbaski
Attorney of Record
Registration No. 34,648

Usha M. Parker
Registration No. 61,939

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)